



# STEM Innovation Proposal 2013-14

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## World Class Broadband Internet: Iowa's Educational and Economic Development Challenge

### **Task Force Members:**

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### **Task Force Chair:**

*John Carver, Superintendent, Howard-Winneshiek Community School District*

*The innovation proposed below is a suggested solution to meet the most pressing challenge to top quality STEM education in Iowa. It supports the Governor's STEM Advisory Council's sweeping agenda targeting **Student interest/achievement, Technology-enhanced instruction, STEM Teacher Recruitment/ Preparation, Post-secondary readiness, STEM Policy, Public Awareness, Public-Private Partnership, and STEM For All.***

### **I. Need**

***Every Iowan should have access to robust and reasonably priced Broadband connectivity, when and where they need it.***

This is crucial for the State of Iowa to compete on a global scale, both educationally and economically. Over 120 School Districts have implemented a "1 to 1" initiative, providing thousands of students with digital devices for learning. Reliable, robust and cost-effective broadband access is crucial to take learning to the next level and move beyond "siloes" classrooms. Broadband access is crucial for students to access technology enhanced instruction, both in the classroom and at home, and to collaborate with students regionally or globally. Without broadband, teachers cannot collaborate with colleagues; participate in online professional development or immediately analyzed results from online assessments.

The primary Broadband challenges to rural, urban, and suburban Iowa is availability and cost. The Iowa Communication Network (ICN) connects the majority of Iowa high schools to the Internet, however, in many areas does not connect junior high or

elementary schools. Districts must look to alternative solutions and providers to connect these students and teachers.

\*\*Current estimates from the Smarter Balanced assessment website indicate that testing will require 10–20 Kbps per student or less.

## II. Solutions

In 2013, from February 19 to 28, Iowa School Finance Information Services (IFIS) surveyed school districts on Broadband issues and concerns. A 52.6% response rate was achieved. Results indicated:

- 63 school District indicated need for more Bandwidth.
- The range for average cost per Megabit a month ranged from \$0 to \$4,134.00. This is unfair and creates a condition of “haves” and “have not’s”.
- There is no overall, coordinated Broadband plan for education or economic development for the state of Iowa.
- The Department of Education is moving to online student assessments. This cannot have a meaningful implementation or distribution without Broadband.

### ACTION:

- Broadband connectivity must become a priority of the highest level. Like the electrification of rural America and the building of farm to market roads, Broadband Internet access is the foundation of 21<sup>st</sup> century creating, learning and commerce. There should be no dead or slow spots in Iowa.
- Tasking an existing state agency, or the creation of a new entity, with the responsibility to provide direct leadership in the development and implementation of cost-effective and equitable Broadband not only to K-12, but also to homes, public accessibility such as libraries, and community centers along with business and industry. Iowa needs to become a global “hot spot”
- In depth review of current Broadband assets, capacities, and legislation. The goal is to identify strengths, growth areas, and to draft legislation that levels cost and incents providers. Connect Iowa is an important asset in this work.

## III. Timeframe

Spring 2013	<ul style="list-style-type: none"><li>• Governor to establish Broadband Connectivity as a priority</li><li>• Task/Create/Charter state agency or commission to establish a coordinated statewide plan for Broadband. Representation to include Business, Industry and Education.</li></ul>
Summer 2013	<ul style="list-style-type: none"><li>• Agency/Commission to review assets, rates, and current legislation</li><li>• Identify low, slow or nonexistent access and reasons why.</li></ul>
Fall 2013	<ul style="list-style-type: none"><li>• Share findings with the Governor, Legislators, Directors of Economic Development and Education.</li></ul>

	<ul style="list-style-type: none"> <li>• Review and prepare briefs for 2014 Legislative Session</li> </ul>
January 2014	<ul style="list-style-type: none"> <li>• Introduce bills that address and create financial incentives for providers to “build out” underserved areas.</li> </ul>
Spring 2014	<ul style="list-style-type: none"> <li>• Agency/Commission to make operational new laws and protocols to address Broadband.</li> </ul>

#### **IV. Cost**

Funding alone is not sufficient to address this priority. Creating a strategic, statewide Broadband plan encompassing business, industry and education requires not only financial capital, but also political capital.

Cost could be absorbed if tasked to an existing agency.

##### **Estimated Funding**

Travel / Meals	\$5,000.00
Technical Support	\$5,000.00
Legal	\$5,000.00
Logistical Support	\$5,000.00
Estimated Budget	\$20,000.00

#### **V. 2013-2014 Measures of success**

- Establishment of Broadband access as a high priority.
- Fully understand the current Broadband situation in Iowa.
- Creation of a coordinated strategic statewide Broadband strategy that addresses cost and infrastructure needs.
- Creation of an Agency/Commission with the authority and responsibility to fully investigate Broadband and make recommendations.
- Legislation introduced to address areas of growth.
- Short term goal: provide .5 megabits per student.
- Long term goal: 1 megabit per student.
- Iowa to become a global “hot spot”.